

Abstract Submitted  
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**Study of the Reaction  $\gamma p \rightarrow \eta\eta'p$** <sup>1</sup> JASON BARLOW, Florida State University, GLUEX COLLABORATION — The motivation behind the GlueX experiment is to search for hybrid mesons. There is strong evidence for the exotic  $\pi_1(1600)$  which has been observed in  $\eta'\pi$ . The  $\pi_1(1600)$  has an isoscalar partner, the  $\eta_1$ , which can possibly be observed in the  $\eta'\eta$  channel. The preliminary analysis presented here considers photoproduction of the final state  $\eta'\eta$  which decays to  $4\gamma\pi^+\pi^-$ . The experiment uses a beam of linearly polarized photons with a peak near 9 GeV incident on a hydrogen target that produces these particles. General features of the data including data selection with a focus on removing backgrounds due to wrong photon combinations will be shown. Mass spectra and intermediate states will be also be presented.

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